

## STATISTICAL ANALYSIS IN BUSINESS SYLLABUS SUMMER 2009

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**WEBSITE:** Go to the Black Board site for this class. The Syllabus will be found under that section of BB and the assignment page will be found in the Course Content Section. The assignment page is updated before class on the Thursday of each week.

Days & Times	Room	Meeting Dates
TuTh 6:00PM - 8:30PM	Bloch -Rm 04	6/9/2009 - 7/30/2009

### **Textbook**

David. P. Doane and Lori E. Seward. *Essential Statistics in Business & Economics*, 2nd edition. St Louis: McGraw Hill Irwin, 2010.

**Online Learning Center:** Browse to [www.mhhe.com/doaneess2e](http://www.mhhe.com/doaneess2e) to access this resource. The Online Learning Center provides chapter-by-chapter study and review material, self-grading quizzes, data files, PowerPoint lecture slides, and more. However, note that I will be modifying and clarifying the PPT slides and these can be found at the Course Content area of BB with the standard format of ChapxxxNEW.ppt where xxx is the chapter number.

### **Course Description**

Data analysis and statistical inference in the context of business management. Communication of analysis and conclusions using text, numbers, and graphics is emphasized. Understanding the conceptual framework of probability and statistics as it relates to statistical tests and procedures is emphasized more than computational methods. Most of the work will be done using a computer spreadsheet. The course includes the topics of estimation, tests of hypotheses, analysis of variance, and multiple regression.

**Prerequisite:** College Algebra.

### **Objectives**

- 1) You will appreciate and understand the strategic role and function of Statistical Analysis in modern enterprises and its contributions to decision making.
- 2) You will understand and apply statistical concepts, models, and techniques in improving decision making and identifying meaningful relationships under risk and uncertainty.

3) Students will be able to apply and evaluate different statistical methods through homework, projects, and tests.

4) An objective of this class is to make this subject and class gratifying to you as you accomplish goals and master concepts that are not well understood by the general population including, 50% of the faculty at this and most other universities.

### Why is this Course Important?

In the 21<sup>st</sup> Century everyone is expected to have some facility with the most important concepts of this class. These most important concepts and skill are those of statistical inferences and modeling. Some individuals who are interviewing you for a professional position will be familiar with many of these concepts. In addition, your potential employers will expect you to have familiarity with Microsoft Office applications; the most important Office application for this class is MS Excel. Every company in the US is implementing major projects related to one or more of the above applications. The emerging economies of the world continue to threaten our competitiveness and your personal wealth and success. **Your competitiveness in the job market will be enhanced through mastering the concepts of this class. All types of organizations in the world are now or have already instituted process improvement programs – the concepts of this class are essential to the successful implementation of process improvements.**

### Grading Options

Your course grade will be determined from two tests, homework, and class participation. Your grade will be calculated using the following formula:

	Option I	Option II
Test I	40%	30%
Test II	40%	50% (where 1/5 of the test is over Test I material)
H/W	10%	10%
Class Participation	10%	10%
Total	100%	100%

You must decide whether you choose Option I or Option II at least two weeks before Test II.

### Those with Disabilities

I am committed to ensure that students with disabilities feel welcomed and supported at UMKC and this course. Those with disabilities should contact Student Disability Services at the University Center, room 131

5000 Holmes Street

(816) 235-5696

Fax: (816) 235-6363

[disability@umkc.edu](mailto:disability@umkc.edu)

<http://www.umkc.edu/disability>

Assistant Director: R. Scott Laurent

### Schedule of Topics

June 09: Introduction to Statistics Data Collection	Chapter 1 Chapter 2
June 11: Describing Data Visually Descriptive Statistics	Chapter 3 Chapter 4
June 16: Probability	Chapter 5
June 18: Discrete Distribution	Chapter 6
June 23: Continuous Distributions	Chapter 7
June 25: Sampling Distributions	Chapter 8
June 30: One-Sample Hypothesis Tests	Chapter 9
July 02: Exam I	
July 07: Two-Sample Hypothesis Tests	Chapter 10
July 09: Analysis of Variance	Chapter 11
July 14: Bivariate Regression ANOVA and/or Regression Analysis.	Chapter 12
July 16: Multiple Regression-I	Chapter 13
July 21: Multiple Regression-II	Chapter 13
July 23: Chi-Square Tests	Chapter 14
July 28: Catch up period and projects.	
July 30: Test II	

### Class Procedures

You are urged to participate in class lectures and discussions and are expected to have studied the scheduled topic before each class. Only after comprehension of the reading assignments should homework be completed. It is impossible to discuss all the material of a period; therefore,

those who have not prepared most of the material prior to the period will not do as well as those who prepare for each class. One of the most important variables in determining your attainment towards any goal is your effort. Of all the studies and research on learning-student-instructor relationships, the most conclusive result has been the importance of student effort toward the learning goal.

Your commitment to this course consists of 6-9 hours per week over and above the time spent in the classroom (note: in summer terms, this might be as much as 6-9 hours per period for the more difficult topics!). A trivial effort spent on homework assignments will result in trivial rewards. A reasonable effort extended towards completion of homework will result in an acceptable course grade. Your guidelines of reasonable effort have been given as 6-9 hours per week.

### **Class Participation<sup>a)</sup>**

**Class participation in this course:** Class attendance is required and students are encouraged to contribute to class discussions. Participation is the key to a lively class. 10% of the course grade will depend upon contributions to our class sessions. Class participation provides the opportunity to practice speaking and persuasive skills, as well as the ability to listen. Comments that are vague, repetitive, unrelated to the current topic, disrespectful of others, or without sufficient foundation will be evaluated negatively. What matters is the quality of one's contributions to the class discussion, not the number of times one speaks.

Everyone will start with a 100% grade for class participation and may lose points when any of the following occur:

Too Many Absences – Every missed class above 6 classes will reduce your class participation by 10%, thus if you miss 7 classes, your class participation grade will be reduced to 90%.

Disruptive class behavior – (something that has never occurred after warnings have been issued) – Every incidence will reduce your class participation by 20%, thus if you have a behavioral problem during class, your class participation grade will be reduced to 80%; the second occurrence will yield a 60% grade, etc.

Non-participation in group activities – several group activities are contemplated for the semester. If you fail to participate in these activities during class, then your class participation will be reduced to 90%.

### **Defining Disruptive Behavior**

**“Disruptive behavior can assume many forms. It may be:**

the student in ... class who persistently arrives late or leaves early;  
the student who talks incessantly ... (during) lecture;  
the student who loudly and frequently interrupts the flow of class with questions or interjections;  
or the student who becomes belligerent when ... (being confronted about) his or her inappropriate behavior in class.”

Source of the above in quotes:

[http://sa.sjsu.edu/judicial\\_affairs/faculty\\_and\\_staff/disruptive\\_behavior.html](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/disruptive_behavior.html)

## **Electronic Communications**

You are expected to use your student email and BB accounts at UMKC; this will be the way I will communicate with you. The primary and required way in which you will receive information and assignments is through the use of our assignment page on BlackBoard. If you have not used your student email account at UMKC you must do so for this class or you will not be aware of important information that I will be distributing to you. More importantly, you are required to regularly check BB, it is suggested that at a minimum you will check the assignment page on BB at noon of each Friday for modifications and updates to the assignment page.

## **Homework Assignments**

Homework assignments will be assigned regularly with the objective of providing you the opportunity of testing your understanding of current concepts and topics. Homework sets are an integral part of fulfilling the course objectives; homework will be collected and graded each week.

## **Homework Requirements**

**Homework is due at the beginning of the class period in which it is due. Your homework should be typed or very neatly written. In addition, your name, date, assignment number, and chapter number are to appear in the upper right hand corner of the first page of the homework assignment. Finally, homework pages should be secured properly with either a staple or paper clip. Homework that does not conform to these requirements will not receive full credit.** If the homework assignment requires a considerable number of Greek or math symbols, then these can be handwritten into the printed pages.

I have noted that many times some students copy homework from their classmates immediately before or during class. This is inconsistent with our purpose, and when this copying is presented as being original, it is dishonest. To preclude such behavior, homework should be neatly typed or extremely neatly hand written. I encourage you to make handwritten notes or corrections on your neatly typed homework during lectures or discussions. When the homework is typed, then handwritten notes during class are clearly part of the in-class learning process and are encouraged. You will not be penalized for handwritten notes on your homework assignments. Again, homework is to be typed prior to class. **If you prefer to very neatly handwrite your assignments, then turn your homework in at the beginning of class.**

You will be tested upon comprehension of the homework as well as the other concepts introduced in the textbook, class discussions, and lectures. **Tests are rigorous!** Those who have not been doing their homework will find that the scheduled tests very adequately measure their knowledge. Be forewarned that trivial efforts result in trivial rewards.

It is highly recommended that you work together in groups if possible. Also, very early in the semester, you should get the telephone number of several people in this class so that if you have to be out of town or miss a class, you have someone to call for assignments. In addition, ask your classmate to collect handouts when you are not at class.

Do not regularly submit homework assignments or papers using email attachments or any other way in which I must printout your homework or papers. Such procedures are not as reliable in format and layout.

### **Attendance**

Class attendance will be taken regularly and when you miss too many classes, it will be used in determining your class participation grade. Unless you receive approval from me beforehand, when you miss the 7th class (4th class in the summer) because of excused or unexcused absences, you will lose 20% of the 10% for class participation for each class. You are responsible for attendance. I will not warn you of your lack of attendance. Bureaucratically, the grade reduction will be made. In the past, students who have not attended regularly have done poorly in the course.

### **Grading Procedures**

The following percentage breakpoints will be used to determine your course letter grade as well as a letter grade on each test.

#### Final Course Letter Grades

95--100 A  
91--94 A-  
88--90 B+  
80--87 B  
77--79 B-  
74--76 C+  
69--73 C  
65--68 C-  
55--64 D  
Less than 55 F

#### Homework and Project Letter Grades

100 A+  
97 A  
92 A-  
89 B+  
84 B  
78 B-  
75 C+  
72 C  
67 C-  
62 D

55 F

The highest grade on a test will be determined by me; however it often equals the highest number of points correct by one or more students. Your final course grade percentage will be calculated using the formula on page 2 of the syllabus.

**Academic Calendar for UMKC:** <http://www.umkc.edu/registrar/acal.asp>

**Final Exam Schedule:** <http://www.umkc.edu/registrar/exam.asp>

### **Missing a Test**

If because of illness or an important circumstance beyond your control you are unable to take a test when specified in the syllabus you should contact me immediately. If you receive permission from me to delay a test, then you have to take that test during finals week or receive an Incomplete for the class. The incomplete can be eliminated during the next semester. Under no circumstances can a test be taken earlier than scheduled. International travel to return home earlier than the end of semester is not an acceptable reason for missing the final examination. If for some important reason you are unable to take the final examination at the time specified by the University than you will have to take an incomplete in the course and take the final examination sometime during the next semester, possibly at the end of the next semester.

### **Missing More than One Test**

If you miss more than one test (including the final examination), then you will automatically be scheduled to take that test during the following semester – thereby receiving an incomplete during this semester.

### **GENERAL CLASS POLICIES**

**The following guidelines are provided to make your learning experience at UMKC and in this course as enjoyable and enriching as possible. Significant time and effort have been expended on my part to make your time and effort in this class as productive, purposeful, and, I hope, enjoyable as possible. If you have sufficient time to devote to this class, then I believe you will feel, after completion of the course, that we have both been successful in this endeavor.**

**ATTENDANCE --Students are responsible for class attendance.**

**--Excessive absences adversely affect grades, 7 excused or unexcused absences results in loss of one letter grade in the course grade.--All students are responsible for class assignments and class lecture materials regardless of attendance. Call a classmate. Your work schedule may require you to travel, in such cases you are responsible for getting assignments from classmates. Class sizes and the many absences of those who work preclude me from routinely giving out individual assignments. Please help and be helped by a fellow classmate in collecting handouts, taking notes, and recording homework assignments.**

**EXAMS--All exams will be taken on the scheduled date unless a prior arrangement is made with the instructor.**

--Exams will cover the assigned materials and class lecturers.

**--DO NOT MISS SCHEDULED EXAMS!!**

**--IF A STUDENT MISSES A SCHEDULED TEST, HE OR SHE MAY HAVE TO TAKE THE EXAM NEXT SEMESTER AND RECEIVE AN INCOMPLETE GRADE OR MAY HAVE A LARGER PERCENTAGE OF HIS OR HER COURSE GRADE DETERMINED FROM THE FINAL. IN NO CASES WILL MAKE-UP FINALS BE GIVEN. A STUDENT MISSING THE FINAL WILL RECEIVE AN INCOMPLETE AND WILL BE REQUIRED TO TAKE THE FINAL NEXT SEMESTER.**

**WRITTEN ASSIGNMENTS, PROBLEMS, PROJECTS, REPORTS, ETC.**

--As in "real life", written assignments are expected when due. --Late assignments will be penalized two (2) points per calendar day --Assignments submitted by mail are received

when postmarked and received by Professor Stephen A. DeLurgio

Bloch School of Business Administration

UMKC

Kansas City, Missouri 64110

--All pages of assignments must be secured together (stapled or clipped), and the earned grade will be penalized for the failure of the pages to be secured.

--All written assignments must be done in good English style and grammar, and must be **LEGIBLE!!**

--Papers that already have been used in other classes can not be used in this class without prior knowledge of both teachers of said classes. Dual submittals of identical papers or papers which have contents which are significantly related must be approved prior to submittal. To submit the same or similar papers for different classes is a form of academic dishonesty and will be penalized as discussed below.

--All quoted material in any paper must be shown in full quotation marks and fully cited with appropriate footnotes or references.

--Under no circumstances can one "borrow" or use the works of others without full and open disclosures and credit for the sources of the information. To use others written or creative works with out giving full credit to the author is academic dishonesty. See the note below for the possible consequences of Academic Dishonesty.

--Students completing major or minor papers for courses should use a consistent and acceptable style sheet for all papers submitted. In almost all cases I will provide you with a handout of the acceptable style sheet of the class. When none is provided, you can assume that the style sheets used in other courses will be acceptable. In all cases, your papers should be well structured, coherent, cohesive, without significant misspellings, well documented with footnotes or references, inclusive of a cover page (with name, address, and phone number), introduction, problem statement, in depth discussion, results (where appropriate), summary and conclusion, and bibliography.

**DROPPING THIS CLASS--**Any student may drop this course at any time with a passing grade (WP) if three conditions are met: 1) the drop occurs before final exam week (or before the day of final exams in the summer term); 2) the student can still theoretically pass the course at that point in time; and 3) the student receives my permission to "drop".

**A REMINDER ABOUT UNIVERSITY POLICY ON SCHOLASTIC HONESTY - UMKC** assumes that all students are enrolled to learn; therefore, any cheating is basically at variance with the purposes of both the student and this institution. Any dishonesty detected in a course (including during examinations or in submitting plagiarized material) may

**result in an "F" grade for that assignment and may be cause for dismissal or suspension. I am required, without alternative option, to report all cheating to the Dean's office.**

**MAKE UP WORK--At times some students mistakenly believe that additional work can be given in order for that student to increase his or her grade. In no circumstances can individual make-up assignments be given in order to increase ones grade. My syllabus clearly defines the criteria used to assess a student's grade in this course. This criterion is used for all students except those with prior approval who must miss a scheduled examination.**

**FINAL NOTE--All major papers, projects and final exams will be retained by the instructor; physical possession of papers and projects by the instructor in no way affect legal rights and future use by the student authors in any subsequent application; however, any student who wants a personal copy of a project or paper should make a copy prior to submittal.**

**--These papers and materials will be retained up to and including the end of the eighth (8) week of the next academic term. Therefore, all questions about final grades or papers, etc., must be settled by that time.**